



EZ Core is a framework designed to make creation of games within Unity easy and performance. EZ Core is designed to be as flexible and at the same time provide performance boost to your game as it minimizes unnecessary stuffs happening backend.

Actor

The [Actor](#) class is basically a normal [MonoBehaviour](#) class but it caches transform and [gameObject](#) references in it. Do not edit this class, new class should derive from here.

Action binders

The action binder class comes with [Trigger](#) & [Collision](#) for both 2D and 3D.

It is basically a component which does not need to be edited, just attach it to a [gameObject](#) with a trigger box in the scene and you can call a method from another class when the collision is detected. It is using [UnityEvent](#). The same event used in [uGUI OnClick\(\)](#).

(It mimics [Unreal's LevelBlueprint](#).)

Good for [scripted events](#), tutorials so you can make a script with all the scripted events and call them from all the triggers via action binders. Does not need to make so many scripts for each trigger anymore !

DebugClass

A wrapper around Unity [Debug.Log](#), [Debug.LogWarning](#), [Debug.LogError](#).

Why and what's the difference ?

Being able to entirely shut down all the loggings with 1 step 😊

Comment out the [#Defines](#) to disable logging of that particular type.

EZ_Math

Collection of useful and common method that eases game creation.

A method that can get you a [random item](#) from a list of item with different [probability](#) values.

A list of useful explosion game logic codes.

The lists goes on and we do this because we don't want you to do the hard work.

EZ_PlayerPrefEx

Wrapper around Unity [PlayerPref](#), Adds [PlayerPref](#) bool, vec2 and vec3.

EZ_Pooling_2

[Pool Manager](#) is a tool that manages instances that are needed over and over again in the same scene.

Objectives :

By managing a pool of instances and [recycling objects](#) that are not in use at that point of time, we can save on [CPU overhead](#) & [memory](#) that are required to [instantiate](#) & [kill](#) the objects.

So, [pool manager](#) can [enhance performance](#) when we are required to work with huge amount of objects that are needed frequently but only for a short amount of time.

Applications :

Spawning of bullets, particle effects, decals...

ActorPooled

The [ActorPooled](#) class is the same as the Actor class, with additional property that holds the pool name, and additional [OnSpawned](#) and [OnDespawned](#) method that is called automatically by the [Pool Manager](#).

New classes must derive from this in order to use the pooling system.

To add new class, right click in project and Create -> [NewActorPooled C#](#)

It will auto generate the class and you just need to add in your custom stuff.

Pool Manager

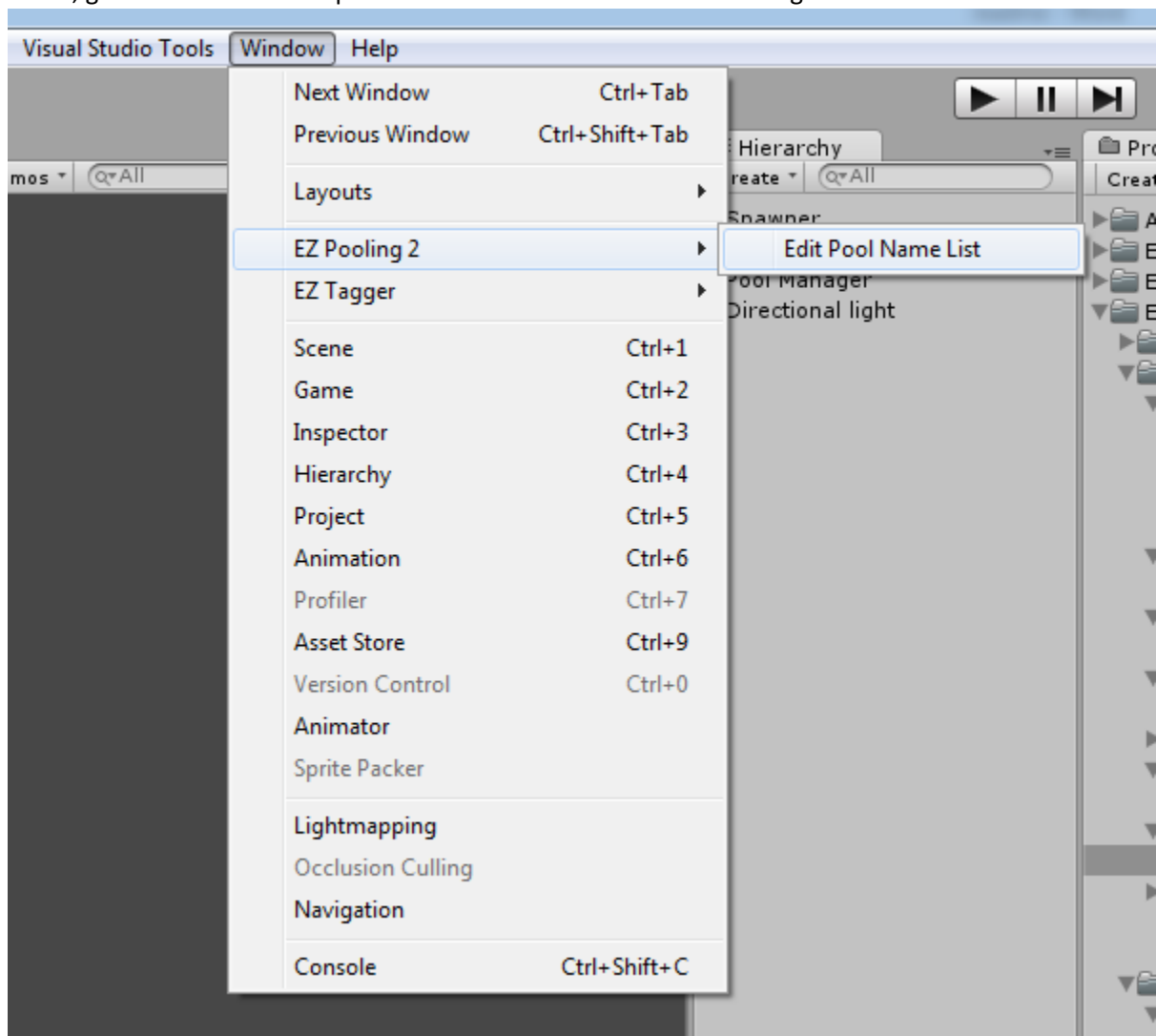
Must exist in the scene. It is the one which is responsible at handling all the object pools. Pools can either be predefined in the scene or be spawned when the '[Auto Add Missing Item](#)' is enabled. Then the

newly spawned pool will take the default settings defined in the Pool Manager script, or uses its own via the [PrefabPoolDefaultOverride.cs](#).

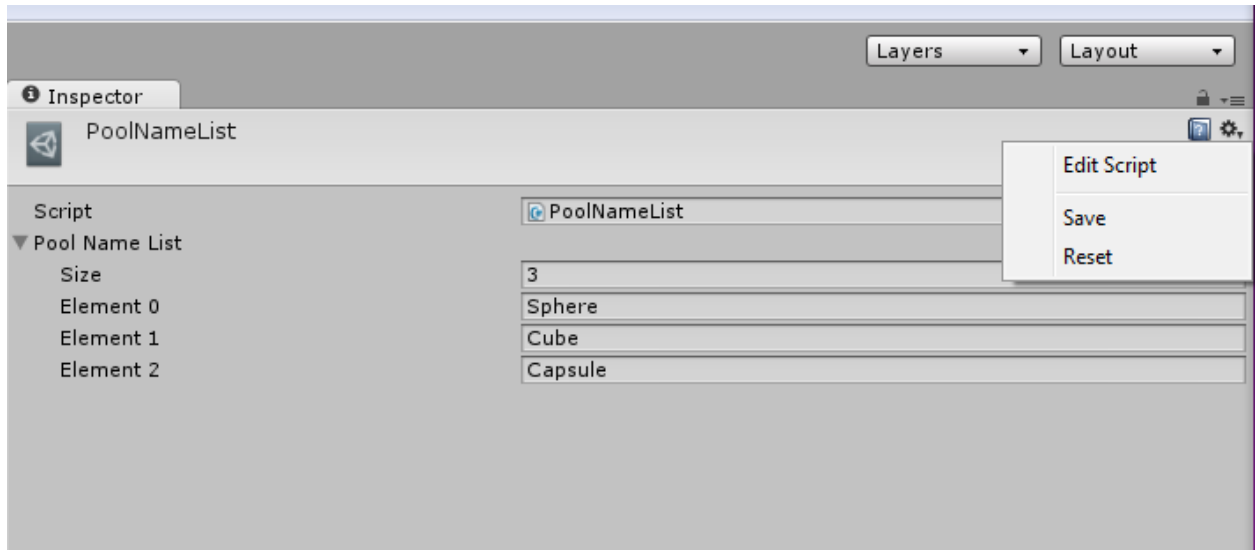
For users that have experienced EZ Pooling, this new pooling system now uses arrays to store the [gameObject](#) references, which is faster but loses the ability to grow.

How to use EZ Pooling 2 in your game ?

1. Create an empty [gameObject](#) and attach the pool manager script.
2. Make sure your prefabs has script that derive from [ActorPooled](#).
3. Give your prefab a pool name. Cannot have similar name in the pool. If you need to add in more name, go to the Window drop down menu item and access EZ Pooling 2 -> Edit Pool Name List



4. After done adding, click the [gear icon](#) on the right and click [Save](#).



5. After Unity finishes compiling, your new pool name should appear in the drop down property.
6. To **Spawn**, replace **Instantiate(...)** with **PoolManager.Spawn(...)**
7. To **Despawn**, replace **Destroy(...)** with **PoolManager.Despawn(...)**

EZ_Tagger

EZ Tagger is the multi-tagging version Unity tag. And it is faster and more efficient as it uses **enum** to compare instead of **strings**. It comes with 2 modes : **Exact** and **Or**.

Exact : the **gameObject** must have all the required tags in order to return true.

Or : at least 1 must match to return true.

To add more tag

1. To add more tag, go to the Window drop down menu item and access EZ Tagger -> Edit Tag List
2. After done adding, click the **gear icon** on the right and click **Save**.
3. After Unity finishes compiling, your new tag should appear in the drop down property.

FindGameObjectsWithTag

- The normal version behave like Unity **FindGameObjectsWithTag**
- The **multitag** version take in a list of **tag** and a **Matcher** type and return objects based on that rule.

Any issue or request for future version freely contact me at rudinesurya@gmail.com

Or you can follow this quick video tutorial

EZ Pooling 2 Setup vid

<https://www.youtube.com/watch?v=94n1VjyRYOc>

EZ Core Action Binder tutorial

<https://www.youtube.com/watch?v=21WIJTVIOW0>

EZ Tagger

<https://www.youtube.com/watch?v=AWcBC3uP2go>

<https://www.youtube.com/watch?v=5WL4PQTTNdw>